Amendments to the claims

Please amend the claims of the instant application as follows:

1. (Currently amended) An apparatus for determining connectivity between one or more device ports thereof and one or more cable ends having corresponding RFID tags attached thereto, the apparatus comprising:

~~a plurality of device ports, one or more of said device ports having a corresponding one of said cable ends connected thereto; and~~

~~a plurality of RFID antennas, one or more of said plurality of RFID antennas being in close physical proximity to each of two or more of said plurality of device ports, one of said plurality of RFID antennas which are in close physical proximity to each of two or more of said plurality of device ports being in close physical proximity to one of said device ports having one of said cable ends connected thereto~~

means for sensing, with use of a first one of a plurality of RFID antennas, said first RFID antenna being in close physical proximity to each of two or more of said plurality of device ports, whether one or more of said RFID tags attached to said cable ends is in close physical proximity to said first RFID antenna; and

means for detecting a connection between one of said plurality of device ports which is in close physical proximity to said first RFID antenna and a cable end having a corresponding RFID tag attached thereto based on said means for sensing with use of said first RFID antenna having determined that said corresponding RFID tag attached to said cable end is in close physical proximity to said first RFID antenna.

2. (Previously presented) The apparatus of claim 1 wherein one or more of said plurality of device ports is in close physical proximity to each of at least two of said plurality of RFID antennas, at least one of said plurality of device ports which is in close physical proximity to each of at least two or said plurality of RFID antennas being one of said device ports having one of said cable ends connected thereto.

3. (Original) The apparatus of claim 2 wherein each of said plurality of RFID antennas is in said close physical proximity to each of two or more of said plurality of device ports and wherein each of said plurality of device ports is in said close physical proximity to each of at least two of said plurality of RFID antennas.

4. (Original) The apparatus of claim 3 wherein the plurality of device ports are arranged in a substantially rectangular arrangement comprising a plural number of columns of device ports and a plural number of rows of device ports.

5. (Original) The apparatus of claim 4 wherein said plurality of RFID antennas comprises a number of column antennas equal to the number of columns of device ports and a number of row antennas equal to the number of rows of device ports, and

wherein each column antenna is in said close physical proximity to each of the plurality of device ports in a corresponding one of said columns of device ports and each row antenna is in said close physical proximity to each of the plurality of device ports in a corresponding one of said rows of device ports.

6. (Original) The apparatus of claim 4 wherein said plurality of RFID antennas comprises a number of column antennas equal to at least one more than the number of columns of device ports and a number of row antennas equal to at least one more than the number of rows of device ports, and

wherein each column of device ports is in said close physical proximity to a corresponding adjacent pair of two of said column antennas and each row of device ports is in said close physical proximity to a corresponding adjacent pair of two of said row antennas.

7. (Previously presented) The apparatus of claim 1 further comprising an antenna multiplexer for selecting one of said plurality of RFID antennas at a time for sensing RFID information, each of said plurality of RFID antennas being connected to said antenna multiplexer.

8. (Previously presented) The apparatus of claim 7 further comprising an RFID reader connected to said antenna multiplexer, said RFID reader for reading said RFID information received based on said sensing of said RFID antennas.

9. (Original) The apparatus of claim 1 further comprising:

means for selecting two or more of said RFID antennas in turn for sensing corresponding RFID information; and

means for determining that a cable end is connected to one of said device ports based on said sensed RFID information corresponding to at least two of said RFID antennas.

10. (Original) The apparatus of claim 9 further comprising means for communicating across a network said determination that said cable end is connected to said one of said device ports.

11. (Original) A method for determining connectivity between one or more of a plurality of device ports and one or more cable ends having corresponding RFID tags attached thereto, the method comprising the steps of:

sensing, with use of a first one of a plurality of RFID antennas, said first RFID antenna being in close physical proximity to each of two or more of said plurality of device ports, whether one or more of said RFID tags attached to said cable ends is in close physical proximity to said first RFID antenna; and

detecting a connection between one of said plurality of device ports which is in close physical proximity to said first RFID antenna and a cable end having a corresponding RFID tag attached thereto based on said step of sensing with use of said first RFID antenna having determined that said corresponding RFID tag attached to said cable end is in close physical proximity to said first RFID antenna.

12. (Original) The method of claim 11 wherein at least one of said plurality of device ports which is in close physical proximity to said first RFID antenna is also in close proximity to a second one of said plurality of said RFID antennas, the method further comprising the step of

sensing, with use of said second RFID antenna, whether one or more of said RFID tags attached to said cable ends is in close physical proximity to said second RFID antenna,

and wherein the step of detecting the connection between one of said plurality of device ports and the cable end having the corresponding RFID tag attached thereto comprises

(i) determining that said step of sensing with use of said first RFID antenna determined that one of said RFID tags attached to said cable ends is in close physical proximity to said first RFID antenna, and

(ii) determining that said step of sensing with use of said second RFID antenna also determined that said one of said RFID tags attached to said cable ends is in close physical proximity to said second RFID antenna.

13. (Original) The method of claim 12 wherein each of said plurality of RFID antennas is in said close physical proximity to each of two or more of said plurality of device ports and wherein each of said plurality of device ports is in said close physical proximity to each of at least two of said plurality of RFID antennas, and wherein the plurality of device ports are arranged in a substantially rectangular arrangement comprising a plural number of columns of device ports and a plural number of rows of device ports.

14. (Original) The method of claim 13 wherein said plurality of RFID antennas comprises a number of column antennas equal to the number of columns of device ports and a number of row antennas equal to the number of rows of device ports,

wherein each column antenna is in said close physical proximity to each of the plurality of device ports in a corresponding one of said columns of device ports and each row antenna is in said close physical proximity to each of the plurality of device ports in a corresponding one of said rows of device ports,

and wherein said first RFID antenna comprises one of said column antennas and said second RFID antenna comprises one of said row antennas.

15. (Original) The method of claim 13 wherein said plurality of RFID antennas comprises a number of column antennas equal to at least one more than the number of columns of device ports and a number of row antennas equal to at least one more than the number of rows of device ports,

wherein each column of device ports is in said close physical proximity to a corresponding adjacent pair of two of said column antennas and each row of device ports is in said close physical proximity to a corresponding adjacent pair of two of said row antennas,

and wherein said first RFID antenna comprises one of said column antennas, said first RFID antenna in close physical proximity to a given column of device ports, and said second RFID antenna comprises one of said number of row antennas, said second RFID antenna in close physical proximity to a given row of device ports,

the method further comprising the steps of:

sensing, with use of a third one of said plurality of RFID antennas, said third RFID antenna comprising one of said column antennas, said third RFID antenna being in close physical proximity to said given column of device ports to which said first RFID antenna is also in close physical proximity, whether one or more of said RFID tags attached to said cable ends which is in close physical proximity to said first RFID antenna is also in close physical proximity to said third RFID antenna, and

sensing, with use of a fourth one of said plurality of RFID antennas, said fourth RFID antenna comprising one of said number of row antennas, said fourth RFID antenna being in close physical proximity to said given row of device ports to which said second RFID antenna is also in close physical proximity, whether one or more of said RFID tags attached to said cable ends which is in close physical proximity to said second RFID antenna is also in close physical proximity to said fourth RFID antenna,

and wherein the step of detecting the connection between one of said plurality of device ports and the cable end having a corresponding RFID tag attached thereto comprises

(i) said steps of sensing with use of said first and third RFID antennas having each determined that one of said RFID tags attached to said cable ends is in close physical proximity to both said first and third RFID antennas, and

(ii) said steps of sensing with use of said second and fourth RFID antennas having determined that said one of said RFID tags attached to said cable ends is in close physical proximity to both said second and fourth RFID antennas,

said one of said plurality of device ports being located in said given column of device ports and in said given row of device ports.

16. (Original) The method of claim 12 further comprising the step of

storing a first set of one or more ID values of said one or more of said RFID tags attached to said cable ends which are in close physical proximity to said first RFID antenna,

storing a second set of one or more ID values of said one or more of said RFID tags attached to said cable ends which are in close physical proximity to said second RFID antenna,

and wherein the step of detecting the connection between one of said plurality of device ports and the cable end having the corresponding RFID tag attached thereto further comprises comparing the first set of stored ID values with the second set of stored ID values to identify one or more ID values in both the first and second sets.

17. (Previously presented) The method of claim 11 further comprising the step of selecting said first RFID antenna with the use of an antenna multiplexer which selects one of said plurality of RFID antennas at a time for sensing RFID information, each of said plurality of RFID antennas being connected to said antenna multiplexer.

18. (Previously presented) The method of claim 17 wherein said step of sensing with use of said first RFID antenna is performed with use of an RFID reader connected to said antenna multiplexer, wherein the RFID reader reads said RFID information received from sensing an RFID antenna.

19. (Original) The method of claim 11 further comprising means for communicating across a network said detecting of a connection between said one of said plurality of device ports which is in close physical proximity to said first RFID antenna and said cable end having said corresponding RFID tag attached thereto.

20. (Original) The method of claim 11 wherein the step of detecting a connection between one of said plurality of device ports which is in close physical proximity to said first RFID antenna and a cable end having a corresponding RFID tag attached thereto detects a first connection between a first device port and a first cable end having a first RFID tag attached thereto,

the method further comprising the steps of:

detecting a second connection between a second device port and a second cable end having a second RFID tag attached thereto; and

determining that said first device port is connected to said second device port based on a determination that the first cable end and the second cable end are opposing ends of a common cable.

21. (Original) The method of claim 20 wherein said step of determining that said first device port is connected to said second device port comprises comparing an ID value of the first RFID tag with an ID value of the second RFID tag and determining that a previously defined relationship exists therebetween.

22. (Original) The method of claim 21 wherein said previously defined relationship comprises a difference only in the least significant bit thereof.